

Sub: Proposal for diversion of 469.18 hectares of forest land in (12) R.Fs. Of Eluru forest division for Chintalapudi Lift Irrigation scheme package – I & II, in favour of Chief Engineer, Godavari Delta System, Dowleswaram, Government of Andhra Pradesh—regarding.

The FAC in its meeting held on 9-10 November, 2016 considered all facts and details with respect to the proposal as below:

1. The Government of Andhra Pradesh, Environment, Forests, Science & Technology (Section. II) vide their letter No. 3733/Section. II/2016 dated 09.08.2016 submitted a fresh proposal to obtain prior approval of the Central Government, in terms of the section-2 of the Forest (Conservation) Act, 1980 for diversion of 469.18 hectares of forest land in (12) R.Fs. of Eluru Forest Division for Chintalapudi Lift Irrigation Scheme Package – I & II, in favour of Chief Engineer, Godavari Delta System, Dowleswaram Government of Andhra Pradesh.
2. The forest land to be diverted is a part of 12 Reserve Forests and Notified U/s 4 of APF Act 1967 and U/s 16 of APF Act 1882. In the Karakapadu RF the density of forest is about 0.6 whereas in the remaining 11 RFs the average density is 0.3
3. As reported by the DFO, 469.180 ha of land in 12 RF blocks mentioned above are proposed for diversion for the purpose of Chintalapudi lift irrigation scheme, and vulnerability of forest area to erosion is insignificant effect as the project is a Lift Irrigation project
4. As per the information provided in the proposal, the alignment through RF is unavoidable from the technical feasibility point of view and is the barest minimum required for this Project and no part of the forest land forms part of National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve, Elephant Corridor etc. Further no rare/ endangered/ unique species of flora and fauna are found in the area and no protected archaeological/ heritage site/ defence establishment or any other important monument is located in the area.
5. No, work has been carried out in violation of Forest (Conservation) Act, 1980.
6. The Compensatory Afforestation scheme for 508.39 ha of Non-forest land proposed to be taken– up in Visakhapatnam from 2017-18 to 2028-29.
7. The District Collector, Eluru, Government of Andhra Pradesh has issued FRA certificate by for diversion of 469.626 hectares certifying the information in respect of all clauses of the MoEFCC's advisory dated 05.07.2013 i.e. diversion of forest land the for facilities managed by the Government and safeguarding the rights of Primitive Tribal Group and Pre-Agricultural Communities as required under the Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, discussion on the proposal in meeting of concerned Gram Sabha (s) maintaining the prescribed quorum, etc. However the vernacular and duly translated copies of the Gram Sabha resolutions were not available.
8. The FAC also observed that Environment Clearance is under process and but the Catchment Area Treatment plan is not submitted, and in its place the user agency has submitted an undertaking
9. There are a number of oustees in 4 villages in West Godavari District, due to the proposal however the Rehabilitation & Resettlement (R&R) Plan has not been submitted and is been stated as under preparation. It has also been stated that the majority of population in the command area are agricultural labour who are economically backward due to lack of

dependable irrigation facilities this project provides assured employment during the construction period of the project and later, through agriculture in 2, 00, 000 acres.

10. The undertaking to bear the cost of Compensatory Afforestation (CA) and Net Present Value (NPV) have been provided. Further the proposal has been recommended by the DFO, CF, PCCF/Nodal Officer (FCA) and the State Govt.
11. The FAC also examined the purpose wise break up forest land proposed for diversion as given below.

S.N	Patch No.	Purpose of the area required	Name of the Reserved Forest	Extent in (Ha.)
i	Lift 2 pressure main. Link canal 1 and 2 and formation of saddle bounds	To lift the water to the Main Canal.	Karakapadu RF	65.140
ii	Main Canal from km. 0.000 to km.1.356	For Main Canal Excavation for Irrigation purpose		
iii	Main Canal from km. 29.351 to km. 31.152 & Jalleru bund.	For Main Canal Excavation for Irrigation purpose and formation	Bedadanuru RF	135.890
vi	Main Canal from km. 48.350 to km. 51.650	For Main Canal and distributaries Excavation for Irrigation purpose	Darbagudem RF	53.780
v	Man Canal from Km61.147 to Km 62.417	For Main Canal Excavation for Irrigation purpose	Erraguntapally RF	16.780
vi	Distributaries from Km 0.000 to 36.00	For the Distributory system	Marlagudem RF	17.260
vii	Distributaries from Km 36.000 to 68.00	For the Distributory system	AR Palem RF	5.650
			Chintalapudi RF	61.170
			Singagudem RF	9.230
			Bhogulu FB	5.310
			Ramasingavar am RF	38.040
			Thadikellapudi RF	33.640
			Nallajerla RF	27.340
			Grand Total	469.180

12. The FAC also considered the following additional information submitted with the proposal

- i. The Chintalapudi Lift Irrigation Scheme will provide irrigation facility to an extent of 2.00 lakh acres (80, 972 Ha.) in 15 Mandals of West Godavari and Krishna Districts, besides providing drinking water to a population of 6.65 lakh people and their cattle living in 160 villages. The Scheme will also serve water to the newly proposed Jalleru reservoir with a capacity of 8 TMC through gravity flow canal of 68 Km, including link canals and distributary network facility to the upland areas.
- ii. The Project proponent has submitted the undertaking to pay the amount towards the cost of treatment of catchment area and also undertake to pay the additional amount if any due to escalation or any other charges as per demand raised by the forest authorities.
- iii. The user agency has submitted the undertaking to pay an amount of such other amount basing on the prevailing market rates at the time of actual implementation, towards supply of gas connections to the project effected families under being the socio economic competent as a part of catchment plan, in addition to, payment of cost of catchment area treatment as provided in the CAT plan with such escalation charges as on the date of implementation.

13. The FAC also took into consideration the Site Inspection Report of Regional Office, Chennai as below;

Site Inspection Report:- dated 28th October, 2016

- i. The Forest Land proposed to be diverted has been inspected by the Shri Dr. MRG Reddy, Addl. Principal Chief Conservator of Forests (Central), Regional Office (South Eastern Zone), Chennai.
 - ii. The additional facts and figures, which this office has come to know and mentioned in this forwarding letter, have been gathered from various sources, such as, the proforma proposal itself, the Working Plans and the information received during the field inspection from the local forest officials as well as project authorities. The site inspection of Reserve Forest land and Compensatory Afforestation land has been carried out by the undersigned on 16.10.2016 and 20.10.2016 respectively.
- i. **Introduction:-** A proposal for diversion of 469.18 ha. of forest land in 12 RF blocks of Eluru Forest Division for Chintalapudi Lift Irrigation Scheme Package I & II in favour of Chief Engineer, Godavari Delta System, Dowleswaram – Proposal under Section 2 of Forest (Conservation) Act 1980 is submitted by the Government of Andhra Pradesh to the Ministry of Environment, Forests & Climate Change, New Delhi. The user agency has certified that all other alternatives for the selection of non-forest land have been explored and in unavoidable circumstances, the above forest land is proposed for diversion, which is the minimum recommended. The PCCF has stated that no violation is reported and submitted all undertakings, as required under Forest (Conservation) Act 1980. The proposal has been uploaded in the website, but under Regional Office and a request is made to correct it to be shown in HQts.
 - ii. **Location of the Project:-** The site of the off-take point from where the water of Godavari river is proposed to be drawn is situated at Pattiseema Village of Polavaram Mandal in West Godavari District, Andhra Pradesh on the road connecting Vijjeswaram to Polavaram (at Km. 33.500). Kovvuru town is the nearest railway station on Chennai – Kovvuru railway line at a distance of 30 Kms. Another big railway station Rajahmundry, which is situated on the other side of the river Godavari in East Godavari District.
 - iii. **Objective of the Project:-** This project is proposed to supply water to the upland areas in 15 Mandals of West Godavari and Krishna Districts for 2.00 lakh acres, who are presently irrigating their lands from rain fed tanks and locally drilled bore wells. This scheme also provides drinking water to a population of 6.65 lakh people and their cattle living in 160 villages.

- iv. Salient Features of the Project:-** The project consists of construction of pump house at Godavari river bank to lift water with a head of 28 mts. And runs through lead channel of 12.3 Kms. to the sump of second stage (for 56 cusecs discharge) from there water will be lifted with a static head of 80 mts. through M.S. Pressure main for 3.5 Kms. and drop into the delivery cistern and from there main canal runs for a length of 68 Kms. along with necessary distributory system to irrigate 2.00 lakh acres of upland area. The Jalleru Reservoir is a balancing reservoir proposed to be formed in between two hills at the right side of the Chintalapudi Main Canal. It is proposed to lift the water of 8.00 TMC to the above reservoir from the main canal during the rainy season for a period of 90 days. For this purpose, a third stage pump house is proposed at Km.32.975 of the main canal to lift the required discharge through the pressure main into the reservoir and again the reservoir is connected to the main canal by constructing an OT. The project also aims at providing drinking water facilities to 6.65 lakh people and their cattle living in 160 villages.
- v.** Main components of the project are Pump Houses and Pressure Mains in three stages, Leading Channel, Main Canal, Branch Canals, Distributaries and Minors and formation of Jalleru Reservoir.
- vi.** In Eluru Forest Division of West Godavari District Reserved Forest area, an extent of 469.18 ha is proposed to be diverted for the purpose of Chintalapudi Lift Irrigation Project. This area is in 14 patches in 12 Forest Blocks, viz., Karakapadu RF, Bedadanuru RF, Marlagudem RF, Darbhagudem RF, Yerraguntapalli RF, A.R. Palem RF, Chintalapudi RF, Singagudem RF, Bhogole RF, Ramasingavaram RF, Tadikalapudi RF and Nallajela RF. The RF blocks inspected by the undersigned on 16.10.2016 are given below: -

S. No.	RF Blocks	Area proposed for diversion (Ha)	Total forest area in the block (Ha)	Remarks
1.	Tadikalapudi	33.64	851.87	Dry deciduous scrub jungle with 0.3 density and has nursery.
2.	Bedadanuru	-----	5955.82	Tropical secondary dry deciduous forest with 0.3 density.
	(i) Mulagalampalli	131.11	----	There are corporation plantations present along with Bamboo plantation.
	(ii) Kamaiahpalem	4.78	----	
3.	Marlagudem	17.26	870.08	Old Tamarindus trees and eucalyptus plantations.
4.	Karakapadu	65.14	649.12	Tropical secondary dry deciduous forests with density 0.6.
	TOTAL	251.93		

Note: There are quite a good chunk of plantations raised by AP Forest Development Corporation, for which compensation is proposed and is included in the estimates.

- vii. The Addl. Principal Chief Conservator of Forests (Central), Regional Office (South Eastern Zone), Chennai in the said site inspection report recommended the proposal for favorable consideration, in view of the strategic importance of the project, stipulating the following conditions, in addition to the usual conditions:**

- a) In view of the irrigation potential proposed to be created, the diversion proposal is recommended. The forest are proposed is mostly either of plantations, as mentioned above

and dry deciduous scrub with the average density of 0.3 with the exception at Karakapadu, which is relatively good forest area with density at 0.6.

- b) The main canal and other distributaries are criss-crossing the area and care should be taken to provide outlets for natural drains, as per the watershed maps available in the Forest Department offices.
- c) The State Government vide their proposal at page 263 has mentioned that out of 508.39 ha CA area proposed, 108.39 ha. is rocky patch, which is not suitable for planting. The same may be examined and alternative, as proposed in next paragraph - 7, may be provided.
- d) The department may justify whether the chain link fencing proposed only for the part of the periphery of the area is sufficient to safeguard the future plantations.
- viii. **The floristic composition:** - The species found are *Terminalia tomentosa*, *Lagerstroemia lanceolata*, *Lansea coromandelica*, *Garuga pinnata*, *Chloroxylon sweitenia*, *Hardwickia binata*, *Acacia sundra*, *Acacia Leucophloea*, *Albizia amara*, *Dalbergia paniculata*, *Mimosops hexandra*, *Diospyros melanexylon*, *Azadirachta indica*, *Erythroxylum monogynum*, *Sapindus emarginatus*, *Strychnos nuxvomica* and *Bauhinia racemosa*.
- ix. **Fauna:** - *Lepous negricolis* (Hare / Kundelu), *Presbytis entellus* (Langur/Kondamuchu), *Macaca mulatta* (Kothi) and *Axis axis* (Spotted Deer).

CA areas identified

(a) Jagannathapuram	-	40.49 ha.
(b) Chakkipally	-	60.82 ha.
(c) Thumnapala	-	202.63 ha.
(d) Ugginapalem	-	204.45 ha.
Total	-	508.39 ha.

- x. **The Compensatory Afforestation:-** The CA areas proposed were inspected on 20.10.2016, as below:

S. No.	Range	Non-forest area location	Sy. No.	Area in ha.	Remarks
1.	Visakhapatnam	Jagannathapuram	50	40.49	Hill top with some vegetation like <i>Azadirachta indica</i> , <i>Wrightia tinctoria</i> , <i>Acacia nilotica</i> , etc.
2.	Chodavaram	Chakipally	329	60.82	-do -
3.	Visakhapatnam	Thumnapala	360	202.63	Hilly with vegetation.

The State Government has mentioned that out of 508.39 ha. of CA area proposed, an area of 108.39 ha. is rocky patch and not suitable for plantations. The same issue was raised with the user agency and the Sub-DFO accompanied to the field visit. The user agency has agreed to provide alternate land at Rayapirejupeta, adjacent to Nallakonda RF in Visakhapatnam range. The same may be confirmed at the earliest through the State Government. Besides, the chain link fence proposed only for the part of periphery may be sufficient to prevent encroachments from local villagers, but may not ensure success of the CA plantation in future.

14. FAC after thorough perusal of the project and having heard the project proponent sought the following essential information from the State Govt.:

1. The Catchment Area Treatment Plan with cost projections as due be provided
2. The duly approved R& R Plan be provided.
3. The complete details of having followed mandated procedure as per Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, including copies of Gram Sabha Resolution (vernacular and translated) be provided.
4. Only 250 Ha of the 508.39 Ha of non-forest land provided is suitable for Compensatory Afforestation (CA). Alternate Compensatory Afforestation land be provided in lieu of the remaining area proposed to be diverted along with site suitability certificate for the entire CA land. The CA scheme to be revised accordingly

15. The above recommendation was communicated to the State Government of Andhra Pradesh vide Ministry's letter dated 16.12.2016 (Pg. 379/c). Now, the State Government of Andhra Pradesh, Environment, Forests, Science & Technology (Section. II) vide their letter No. 3733/Section-II/2016 dated 22.06.2017 (Pg. 380-622/c) has forwarded additional information the details of the information as desired by the Government of India, Ministry of Environment, Forests & Climate Change, GoI and the replies furnished by the Principal Chief Conservator of Forests & Head of Forest Force, Andhra Pradesh are as follows:-

S. No.	Observations raised by GoI, MoEF&CC	Reply furnished by PCCF & HoFF
1	The catchment area treatment plan with cost projection as due be provided.	In this regard the state government informed that the user agency has submitted that in the 1 st phase the revised requirement of Forest land is limited to canals and pressure main works duly deleting Jallery bund, spill channel and saddle bund portion. As much there will not be any submergence of Forest area in Jalleru Reservoir system in the 1 st phase. Hence, the CAT plan does not arise in the 1 st Phase. However, CAT plan will be submitted during the 2 nd phase proposals.

		However, the copy of the approved CAT plan has not been submitted.
2	The duly approved R&R Plan be provided	In this regard the state government informed that the user agency has submitted that in the 1 st phase, the revised requirement of Forest land is limited to canals & pressure main works. As such the rehabilitation and resettlement plans does not arise in the 1 st phase. However, R&R plan will be submitted during the 2 nd phase proposals, as there will not be any submergence in the 1 st phase. However, the copy of the approved R & R plan has not been submitted.
3	The complete details of having followed mandated procedure as per Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006. Including copies of Grama Sabha Resolutions (vernacular and translated) be provided.	In this regard the state government informed that the user agency has submitted necessary documents under Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 including Grama Sabha Resolutions duly signed by the Collector & District Magistrate, West Godavari. The copy of the same may kindly be seen at (Pg. 385-488/c) .
4	Only 250 ha of the 508.39 ha of non-forest land provided is suitable for Compensatory Afforestation (CA). Alternate compensatory afforestation land be provided in lieu, of the remaining area proposed to be diverted along with site suitability certificate for the entire CA land. The CA scheme to be revised accordingly.	In this regard the state government informed that the Chief Conservator of Forests, Rajahmundry vide letter dt.09.06.2017 has submitted the revised CA scheme for 519.88 ha for Rs.924.59 Lakhs as per the revised requirement of forest land in the 1 st phase submitted by the Divisional Forest Officer, Visakhapatnam and CCF/CF, Vishakhapatnam for the non-forest CA land identified for 519.88 ha and handed over in Vishakhapatnam. The excess land of 519.88-347.64=172.24 ha may be adjusted in the next phase of the project. The copy of the same may kindly be seen at (Pg. 496-622/c) .

16. Other remarks related to this project submitted by the State Government of Andhra Pradesh:-

1. The State Government has reported the User Agency has submitted the statements showing the area details of forest land required in phase-I and phase-II with reference to RF wise, Compartment wise, Component wise, and the revised CA scheme with the following 3 types of maps for ready reference **(Pg. 489-495/c):-**
 - i. Map showing the revised requirement of forest land (347.64 ha) in first phase.

- ii. Map showing the balance requirement of forest land (3294.36 ha) in second phase.
- iii. The map showing the requirement of total forest land of 3642 ha and other lands.

2. The Principal Chief Conservator of Forests & Head of Forest Force, Andhra Pradesh in his letter 4th cited, has reported that the demand of the project is increased by the Government of Andhra Pradesh vide G.O.Ms.No.94, Water Resources Department, Dt.03.09.2016 and accordingly the requirement of forest land also increased from 2704 ha to 3642 ha in which the Jalleru reservoir component of forest land also increases from 1938 ha to 2875 ha as the capacity of the reservoir is increased from 8 TMC to 20 TMC extending the irrigation facilities to Krishna District also. In the process of phasing out the project the Water Resources Department Authorities i.e. the user agency proposed to obtain the Forest Clearances phase wise as noted below:-

S. No.	Category	Forest land required in (Ha)	Remarks
1	First Phase	347.64	Jalleru Reservoir Component is withdrawn in this phase
2	Second Phase	3294.36	The Jalleru Reservoir component will be included in this phase.
	Total	3642.00	

3. The State Government has also reported that the Water Resources Department has come up with proposal for diversion of 347.64 Ha (i.e. 469.18 Ha – 121.54 of Forest land in First Phase duly deleting the Jallery Bund – 56.02+ Spill was-60.74 + Saddle bund -4.78 which will be executed in second phase. With the above change, the requirement of forest land in 1st phase is only 347.64 ha as it is the linear stretch for canal and pressure mains. Hence, as reported by the User Agency, impounding of water and submergence of forest area in Jalleru reservoir does not arise in first phase.

It is also imperative to mention here that the State Government has not yet furnished the CAT Plan, R&R Plan stating the above reasons . The purposed-wise break-up for 347.64 ha may please be seen at [page 459-491/c](#). **The shape file for revised CA is not given.**

4. It is also pointed out here that the DFO Visakhapatnam in his inspection note stated that the entire area of 519.88 ha identified for CA is not suitable for plantation through semi- mechanical plantation method as there is good nature growth and removal of their natural forest will lead to excessive soil erosion (Page 520-524/c) and there is only possibility of ANR model of planting in the following area:-

S. No.	Identified Area with Location	Suitable for ANR	Excavation of continuous contour trenches	Page no.
1.	140.28 Ha. (Rayapurayapeta village)	100 ha	30 ha	520/c

2.	54.08 Ha (Cheeralapalli village)	30 ha	20 ha	521/c
3.	60.72 ha (Gandhavarman villages)	30 ha	30 ha	522/c
4.	202.42 ha (Tunnapala Village)	150 ha	40 ha	523/c
5.	62.38 ha (Bhogpuram village)	-	40 ha	524/c
Total	579.88 ha	310 ha	160 ha	

5. It is also observed by AIGF (RP) that now project is to be taken of in 2 phases apparently and CAT plan, R & R Plan, have not been provided stating that during phase I on canals pressure main works are involved and there will be no submergence. It may be noted that this has resulted in reduction of area from initially purposed 469.18 ha for 347.64 ha, but second phase with requirement of 3294.36 ha will be taken up later. It prima facie appears that canals pressure mains will be taken up Ist , later other works including reservoir will be taken up. **The issue of concern is that by permitting this project in apparent piece meal basic *fait accompli* situation may arise.**

It may also be pertinent to note that in the area (Eluru Forest Division) large details of forest land apparently 5230 ha has already been proposed for Industrial Hub also.

The instant proposal of lift Irrigation has been modified and no apparent reason Justification exist for taking the matter up in phases and present modification.

The State Government may be asked to clarify whether the phase I can survive if phase II is not considered favorably.

DSS analysis Report: The shape file as provided has been analysed by DSS cell and their comprehensive report may kindly be seen at F/R-1. The major observation stated in the report are as follows:

- (i) DSS based decision: Undecided
- (ii) Forest Cover Map: MDF: 121 ha., Open forest: 182 ha. and Non Forest: 167 ha
- (iii) Forest type present: Southern Dry Mixed Deciduous Forest:27 ha., Dry Deciduous Scrub: 178 ha., and Secondary Dry Deciduous Forest:60 ha., plantation/TOF:53 ha. and Non-Forest: 153 ha.

- (iv) **For Compensatory afforestation:** As depicted through Satellite imagery of Google Earth dated 4-1-2016, the corresponding land proposed for CA is free from any kind of encroachment and no such dense vegetation is visible.

In view of the above facts related to the proposal, it is proposed that proposal may be submitted to the FAC for its consideration in its forthcoming meeting scheduled to be held on **20th July, 2017**.
